

CHAPTER 1024

Excavation and Utility Line Installation

1024.01	Purpose.	1024.09	Contractor requirements;
1024.02	Goals and objectives.		demolition or excavation.
1024.03	Scope.	1024.10	Operator requirements; demolition
1024.04	Definitions.		or excavation.
1024.05	Applicability of existing	1024.11	Contractors; hazardous and
	ordinances and other laws.		emergency procedures.
1024.06	Administration and enforcement.	1024.12	Operators; hazardous and
1024.07	Exceptions.		emergency procedures.
1024.08	Demolition or excavation; prior	1024.99	Penalty.
	notice.		

CROSS REFERENCES

Water systems - see S.U. & P.S. Ch. 1042
 Emergency water supply - see S.U. & P.S. Ch. 1044
 Sewer construction - see S.U. & P.S. Ch. 1060, 1064.14
 Excavations in parks - see S.U. & P.S. 1092.06

1024.01 PURPOSE.

The purpose of this chapter is to enumerate the policies of the County of Loudoun and utility operators serving this County for use in the effective prevention of construction related accidents resulting in and/or from utility line disruptions.

(Ord. 91-04. Passed 3-5-91.)

1024.02 GOALS AND OBJECTIVES.

This chapter is enacted in order to:

- (a) Facilitate the protection of persons and property from death or injury which may result from the destruction of, disruption of, or damage to underground utility lines during excavation or demolition.
- (b) Protect the health, safety and general welfare of the community by preventing the interruption of essential services resulting from the destruction of, disruption of, or damage to underground utility lines during excavation or demolition.

(Ord. 91-04. Passed 3-5-91.)

1024.03 SCOPE.

The scope of this chapter is intended to encompass:

- (a) All utility operators serving any portion of or maintaining any utility line within the County of Loudoun and the representatives thereof; and
- (b) All contractors performing demolition or excavation on any private property, public right of way or public easement within the County of Loudoun.

1024.04 DEFINITIONS.

As used in this chapter:

- (a) "Blasting" means the use of an explosive to excavate.
- (b) "Contractor" means any person, including a subcontractor, who contracts with an operator or the owner of public or private property, for the purpose of engaging in excavation, demolition, or blasting.
- (c) "Demolition" means the razing of any structure above the existing grade, or the demolition of any structure below the existing grade.
- (d) "Emergency" means any condition which may cause an interruption of essential services resulting from the destruction of, disruption of, or damage to underground utility lines. (Emergency is classified as less severe than hazardous).
- (e) "Excavate" or "excavation" means any operation in which earth, rock, or other material in the grounds is moved, removed, or otherwise displaced by means of any tools, equipment, or explosives and includes, without limitation, grading, trenching, digging, ditching, dredging, drilling, auguring, tunnelling, scraping, cable or pipe plowing and riving, wrecking, razing, rendering, moving, or removing any structure or mass of material, but not including the tilling of the soil for agricultural purposes.
- (f) "Hazardous" means any condition which may cause an interruption of essential services and, in addition, may result in death or injury to persons or property due to destruction of, disruption of, or damage to underground utility lines. (Hazardous is classified as more severe than emergency).
- (g) "Mechanized equipment" means powered equipment used to excavate, and includes equipment used for plowing-in or pulling-in cable or pipe.
- (h) "Notify, notice or notification" means the completed delivery of information to the person to be notified and the receipt of same by such person to be notified within the time limits prescribed in this chapter. When the person to be notified is an operator, the notification shall be made to the notification center pursuant to Sections 56-265.16:1 and 56-265.17, of the Code of Virginia of 1950, as amended, and, when the notification is to be made by an operator in response to a notification it has received, such notification shall be made to the same person who notified the notification center. Notification may be either orally or in writing, with written notification center. Notification may be either orally or in writing, with written notification to be made by hand delivery, telegram, facsimile, United States mail or by United States certified mail, return receipt requested. Notice given orally should be recorded and made part of the permanent record at the notification center.

- (i) "Notification center" means any organization among whose purpose is the dissemination to one or more operators of the notification of planned construction activities in a special area. For the purpose of this chapter, Miss Utility (Telephone 800-257-7777) and/or the current holder of the one call State Certification Center, shall be considered to be the notification center.
- (j) "Operator" means any person who furnishes or transports any of the following materials or services by means of a utility line:
 - (1) Flammable, natural, toxic or corrosive gas;
 - (2) Petroleum, petroleum products and hazardous liquids;
 - (3) Electricity;
 - (4) Sanitary sewer;
 - (5) Communications;
 - (6) Water; or
 - (7) Cable television.
- (k) "Person" means any individual, partnership, association, corporation, state, subdivision or instrumentality of a state, or the legal representative thereof.
- (l) "Property owner" means any person who owns fee title to or leases a given area of land, excluding, however, any recorded easement or right of way.
- (m) "Surface replacement" means the routine maintenance or limited replacement of sidewalks, curbs and gutters, and similar structures, including patch-type road paving and street repairs.
- (n) "Utility line" means any underground conduit and its related facilities including pipe or cable, by which an operator furnishes or transports material or services.
- (o) "White lining" means the designation of the proposed limits of excavation or demolition with white paint by the contractor.
- (p) "Working days" means Monday through Friday, excluding, however, any public and legal holidays.
(Ord. 91-04. Passed 3-5-91.)

1024.05 APPLICABILITY OF EXISTING ORDINANCES AND OTHER LAWS.

No provision of this chapter shall exempt any person from complying with the requirements and provisions of any existing laws and ordinances, including those of Loudoun County, the Commonwealth of Virginia, the State Corporation Commission of Virginia, the Office of Pipeline Safety of the U.S. Department of Transportation, or the U.S. Department of Labor.
(Ord. 91-04. Passed 3-5-91.)

1024.06 ADMINISTRATION AND ENFORCEMENT.

This chapter shall be administered and enforced by the Director of the Loudoun County Department of Building and Development or his or her designee who may cause to be performed such tasks and inspections as he or she may deem reasonably necessary.
(Ord. 91-23. Passed 9-17-91.)

1024.07 EXCEPTIONS.

(a) The requirements of this chapter shall not apply to any property owner who, without the aid of a contractor, is performing work within the boundaries of his or her property which does not require the acquisition of any permit issued by Loudoun County.

(b) The requirements of Section 1024.08 shall not apply to any person acting as or for the operator of a damaged line in making repairs to his or her own underground facilities or repairs to the streets or alleys themselves in a condition of emergency when such repairs must be made within a shorter period of time than that provided for in Section 1024.08(a). However, this exemption from obtaining information shall not excuse the person making the excavation from taking all reasonable precautions to protect underground facilities or from any liability for damages caused by his or her negligence.

(c) Excavation by a contractor for the purpose of surface replacement shall not require compliance with the notification and marking procedures of this chapter only if it does not exceed in depth the structure to be replaced or repaired.

(Ord. 91-04. Passed 3-5-91.)

1024.08 DEMOLITION OR EXCAVATION; PRIOR NOTICE.

(a) No person shall make or begin any excavation or demolition without first notifying the notification center for that area at least forty-eight hours but no more than ten days, excluding Saturdays, Sundays, and legal State and national holidays, prior to the commencement of the proposed excavation or demolition, or within such time as agreed upon in writing at any preconstruction meeting. Notice to the notification center shall be deemed to be notice to each operator who is a member of that notification center. When an operator requests a person to perform work with less than forty-eight hours notice, the operator shall be required to meet the notification requirements of this section.

(b) Notification as provided in subsection (a) hereof shall be valid for ten working days and may be extended for an additional ten working-day period upon request to the operator at least forty-eight hours prior to expiration of the original ten working-day period.

(c) Every notice served by any person on a notification center shall contain the following information:

- (1) The contractor's name and telephone number;
- (2) The name of the person for whom the proposed work is being done;
- (3) The date and approximate time work is to commence;
- (4) The location and approximate depth of proposed work;
- (5) The nature and extent of work to be done;
- (6) The contractor's field representative or field contact, and field telephone number, if available; and
- (7) Any special remarks.

(d) The telephone number(s) to be utilized for serving notice to operators as required in subsection (a) hereof shall be located on the approved site plan, subdivision plan, or engineering plan which is to be at the site during excavation or demolition as required in Section 1024.09(c).

(e) In the event of ongoing excavation or demolition, notification by a contractor as provided in subsection (b) hereof shall be required every ten working days as long as said excavation or demolition is continuous and all markings of underground utility lines remain clearly visible, as provided in Section 1024.10(b).

(f) After giving notice required by this section, if no notice or marking has been made as provided in Section 1024.10, the person shall not begin any excavation or demolition until three hours after an additional notification to the operator.
(Ord. 91-04. Passed 3-5-91.)

1024.09 CONTRACTOR REQUIREMENTS; DEMOLITION OR EXCAVATION.

(a) Verification that rough grading is to within six inches of finished grade must be provided to the operator in writing by the contractor or property owner before such operator shall commence excavation for the installing of his or her utility lines.

(b) When excavation approaches within two feet of the location of any existing utility line(s), which shall have been previously located horizontally as provided in Section 1024.10(a), the exact location of such existing utility line(s) must be determined by adequately exposing the same by hand digging within the proposed horizontal or vertical limits of excavation before excavation may resume. To prevent damage to such exposed existing utility lines, or the protective coating thereof, proper support shall be provided where required.

(c) Any contractor performing excavation or demolition is required to have an approved site plan, subdivision plan or engineering plan indicating the plan view of all known existing and proposed utility lines at the site during excavation or demolition.

(d) Any contractor performing excavation or demolition should designate the proposed limits of such excavation or demolition by white lining the affected area.

(e) Any person who is designated to operate mechanized equipment for the purpose of excavation or demolition shall not perform such excavation or demolition until he or she has examined the plan(s) provided in subsection (c) hereof.

(f) The act of obtaining information as required by this chapter shall not excuse any person making any excavation or demolition from doing so in a careful and prudent manner nor shall it excuse such person from liability for any damage resulting from his or her negligence.
(Ord. 91-04. Passed 3-5-91.)

1024.10 OPERATOR REQUIREMENTS; DEMOLITION OR EXCAVATION.

(a) An operator who receives notification of a proposed excavation pursuant to Section 1024.08(a) and who has received, if applicable, verification of site grading pursuant to Section 1024.09(a), shall provide clearance for excavation to the contractor before such excavation may commence by:

- (1) At least one hour prior to the commencement of the proposed excavation, horizontally locating its utility lines at the site, and notifying the contractor that this marking has been accomplished; or
- (2) Notifying the contractor that the proposed excavation will not affect its existing utility lines. (Ord. 91-04. Passed 3-5-91.)

(b) Horizontal location of utility lines at the site of excavation shall consist of a permanent marking system approved by the Office of Pipeline Safety of the U.S. Department of Transportation, or the State Corporation Commission of Virginia, or a temporary marking system approved by the Director of Building and Development, clearly and definitely indicating the horizontal location of the operator's facilities.

(Ord. 91-23. Passed 9-17-91.)

(c) In order to expedite horizontal location of utility lines, each operator shall:

- (1) Provide locating services to mark all facilities affected by the excavation;
- (2) Provide to designing engineers horizontal location data on its utility lines prior to field survey for designing new work so that such information on existing utility lines may be included in survey notes;
- (3) Have the option to allow the locating crew of another operator to horizontally locate said facilities, provided that clearance to do so has been given in writing; and
- (4) Indicate the horizontal location of their utility lines on a site map if requested by the contractor.

(d) When trenches excavated for the installation of gas pipelines are backfilled, a continuous tape, or similarly effective device, shall be installed above all direct burial plastic mains, services, stubs and stub extensions. The tape shall not be less than three inches wide, brilliant in color and imprinted with words clearly defining the utility line as "GAS". The tape shall be impregnated with metal so that locating equipment can readily pick it up. The remainder of the backfill shall be placed in a manner that equals the original condition.

(e) When repairs are made to underground gas pipelines, and/or the tape and related requirements as provided in subsection (d) hereof have been disrupted and severed during excavation, such tape shall be installed or replaced at the completion of repairs prior to backfilling.

(f) An operator who receives notification of a proposed demolition pursuant to Section 1024.08(a) shall insure clearance for demolition by:

- (1) Disconnecting, or causing to be disconnected, as agreed upon by the operator and contractor, all of its utility lines to the structure to be demolished, as well as capping where necessary;

- (2) Advising the contractor of the appropriate means of assuring adequate protection for its other utility lines in the vicinity which might be subject to unusual stress during demolition; and
- (3) Notifying, or causing to be notified, the contractor that such disconnection has been accomplished or that his or her utility lines will not be affected by such demolition.

(g) If a utility line operator cannot mark the location of its underground lines at least one hour before the proposed excavation or demolition is scheduled to begin, the operator shall notify the contractor of the date and time when the line will be marked. This date shall not exceed three working days after the original scheduled work date. (Ord. 91-04. Passed 3-5-91.)

1024.11 CONTRACTORS; HAZARDOUS AND EMERGENCY PROCEDURES.

(a) Communication between the job site and the contractor's base office shall be maintained at all times through the use of a two-way radio system or some other means approved by the Department of Building and Development.
(Ord. 91-23. Passed 9-17-91.)

(b) When any person damages a utility line or the protective coating thereof, or accidentally exposes or severs a utility line during excavation or demolition, an emergency condition shall be deemed to exist and the operator of such utility line shall be directly notified at that time.

(c) When any gas or flammable liquid utility line is severed, or damaged to the extent that there is escapement of its contents, a hazardous condition shall be deemed to exist and the operator of such utility line and the Emergency Communications Center (Dial "911") of Loudoun County shall be immediately notified.

(d) Contractors shall display in plain sight on the instrument or control panel or the dashboard of all trucks and mechanized equipment operated by them, the current telephone number which is to be utilized to serve hazardous-condition notice as required by subsection (c) hereof.

(e) The telephone numbers to be utilized in serving emergency-condition notice as required in subsection (b) hereof shall be located on the approved site plan, subdivision plan or engineering plan which is to be at the site during excavation or demolition as required by Section 1024.09(c).

(f) It shall be unlawful to backfill around a damaged utility line, as described in subsection (b) or (c) hereof until the operator of said utility line has been notified of such incident and has repaired the damage and/or has given clearance to backfill in writing.

(g) During an emergency or hazardous condition, it shall be lawful to excavate, without using blasting, if notification as required in subsection (b) or (c) hereof is given as soon as reasonably possible.
(Ord. 91-04. Passed 3-5-91.)

1024.12 OPERATORS; HAZARDOUS AND EMERGENCY PROCEDURES.

(a) All operators shall make available on a twenty-four hour basis adequate emergency response crew(s), including answering personnel, radio dispatchers, appliance servicemen and utility repair crews capable of performing all work tasks necessary to cope with emergency or hazardous situations. The number of emergency work crews shall be determined by the operator based upon reasonable response time (one hour estimated time or arrival to the emergency scene during other than work hours) and the number and frequency of experiences recorded.

(b) All reports of hazardous and/or emergency conditions received by operators shall be reported immediately to the Emergency Communications Center (Dial "911") of Loudoun County and all reports of hazardous conditions received by the Emergency Communications Center, Department of Fire, Rescue and Emergency Services of Loudoun County, shall be reported immediately to the appropriate operator.

(c) Emergency shut-off valves shall be provided for all new gas service installations such that:

- (1) All gas services supplying inside meters shall be equipped with an outside shut-off at the curb or property line. Access shall be through a stop-cock box, the top of which is flush with the surrounding grade.
- (2) Steel or copper services to outside meters shall be equipped with an outside shut-off as provided in paragraph (c)(1) hereof and an above ground shut-off at the meter.
- (3) Plastic services to outside meters shall be equipped with an outside shut-off at the meter.

(d) The decision to shut off a utility line during a hazardous condition shall be jointly made by the Incident Commander, Loudoun County Department of Fire, Rescue and Emergency Services and an authorized representative for the utility company concerned. If time and circumstances require, the decision may be made by either the Incident Commander or the authorized utility representative with immediate notification provided to the other and to the Emergency Communication Center, Loudoun County Department of Fire, Rescue and Emergency Services.

(e) Utility services interrupted under hazardous conditions, as referenced in subsection (d) hereof, may be restored by the authorized utility company representative only after investigation and verification of safety by the Loudoun County Department of Fire, Rescue and Emergency Services. (Ord. 91-04. Passed 3-5-91.)

1024.99 PENALTY.

(a) Any person who violates any provision of this chapter, by doing a prohibited act, failing to perform a required act, or failing to perform permitted acts in the prescribed manner, shall be deemed guilty of a misdemeanor and shall, upon conviction, be punishable by imprisonment not to exceed thirty days or by a fine not to exceed one thousand dollars (\$1,000), or both. Each day a violation of this chapter shall continue shall constitute a separate offense.

(b) If, during excavation or demolition, an underground utility line is damaged by any person who has failed to comply with any provision of this chapter, any permit(s) acquired through the County of Loudoun to perform work related to said excavation or demolition (including permits for building, grading, blasting, plumbing, electrical and/or mechanical work) may be revoked and any fees paid to the County for said permit(s) may be forfeited. In order to continue work, a new application for permit(s), if revoked, must be filed; plans of the proposed excavation or demolition must be re-examined; the location of all existing utility lines must be verified in writing by each operator having facilities in the area of proposed excavation or demolition; and new fees, if forfeited, must be paid.

(c) Any person who is convicted two or more times within a twelve-month period of violating any provision of this chapter which resulted in damage to any existing utility line, shall be subject to suspension or revocation of any license(s) or permit(s) issued by the County of Loudoun to perform related work for a period not to exceed twelve-months. Furthermore, no subsequent permits or licenses to perform said related work shall be issued to such convicted persons during that suspension or revocation period.

(d) The operator of a utility line shall notify the County of Loudoun of any action by a contractor that is deemed to be a violation of this chapter and that may result in a hazardous condition. Upon such notification, a representative of the County shall promptly inspect the work site and, if deemed necessary, require the contractor to stop work until compliance with this chapter is verified by the County or operator of the line. (Ord. 91-04. Passed 3-5-91.)